



State of Utah

DEPARTMENT OF ENVIRONMENTAL QUALITY
DIVISION OF AIR QUALITY



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SEC
SEP 14 2001

DAQE-749-01

September 11, 2001

S. Gale Chapman
Intermountain Power Service Corporation
850 West Brush Wellman Road
Delta, Utah 84624

Dear Mr Chapman:

Re: Amendment for Approval Order DAQE-523-01, to Add Inadvertently Missed Data
Millard County - CDS-A, ATT, Title V, Title IV, NSPS
Project Code: N0327-008

The attached document is an Approval Order for the above-referenced project.

Future correspondence on this Approval Order should include the engineer's name as well as the DAQE number as shown on the upper right-hand corner of this letter. Please direct any technical questions you may have on this project to Ms. Milka M. Radulovic. She may be reached at (801) 536-4232.

Sincerely,

[Signature]
Richard W. Sprott, Executive Secretary
Utah Air Quality Board

RWS:MMR:aj

cc: Central Utah Public Health Department
Mike Owens, EPA Region VIII

STATE OF UTAH

Department of Environmental Quality

Division of Air Quality

**AMENDMENT FOR APPROVAL ORDER
DAQE- 523-01, TO ADD INADVERTENTLY MISSED DATA**

**Prepared By: Milka M. Radulovic, Engineer
801-536-4232**

APPROVAL NUMBER

DAQE-749-01

Date: September 11, 2001

Intermountain Power Service Corporation

**Source Contact
Rand Crafts
(435) 864 6494**

**Richard W. Sprott
Executive Secretary
Utah Air Quality Board**

Abstract

Intermountain Power Service Corporation (IPSC) operates the Intermountain Generating Station (IGS) coal fired steam-electric plant, consisting of two 875 MW units, that is located near Delta in Millard County. IPSC is requesting an amendment to their current Approval Order (AO) DAQE-523-01, to correct the consolidated AO. The amendments were approved in previous AOs and were inadvertently missed during the AO consolidation process. IGS was approved to spray their coal with self-generated used oil for energy recovery and this condition was not included in the consolidated AO. Additionally the following was not included in the AO:

- *A "30-day rolling average" for the NO_x and SO₂ testing limits was added;*
- *The consumption limit language for the auxiliary boiler was changed to require records for "when the auxiliary boiler is in operation" instead of "when the plant is in operation"*
- *Dust control condition language was changed to reflect that IPSC has already submitted a dust control plan, and*
- *The language was added that allows bituminous and subbituminous coals as a fuel in the 8,500 x 10⁶ Btu/hr boilers along with diesel fuel or natural gas as fuels during start-ups, shutdowns, upsets and flame stabilization.*

Millard County is an attainment area of the National Ambient Air Quality Standards for all pollutants. New Source Performance Standards, Subparts Da and Y apply to this source. Boiler 1 & 2 are also Group I, Phase II units under the Acid Rain Program. IPSC is a major source of NO_x, SO₂, CO, and PM₁₀. Title V of the 1990 Clean Air Act applies to this source. The Title V permit will be administratively amended after this AO has been issued. Since these amendments were approved in previous AOs, there will be no public comment period required.

General Conditions:

1. This Approval Order (AO) applies to the following company:

Intermountain Power Service Corporation
850 West Brush Wellman Road
Delta, Utah 84624
Phone Number: (435) 864-4414
Fax Number: (435) 864-6670

The equipment listed below in this AO shall be operated at the following location:

PLANT LOCATION:

850 West Brush Wellman Road, Delta, Millard County, Utah
Universal Transverse Mercator (UTM) Coordinate System: datum NAD27
4,374.4 kilometers Northing, 364.2 kilometers Easting, Zone 12

2. All definitions, terms, abbreviations, and references used in this AO conform to those used in the Utah Administrative Code (UAC) Rule 307 (R307), and Title 40 of the Code of Federal Regulations (40 CFR). Unless noted otherwise, references cited in these AO conditions refer to those rules.
3. The limits set forth in this AO shall not be exceeded without prior approval in accordance with R307-401.

4. Modifications to the equipment or processes approved by this AO that could affect the emissions covered by this AO must be approved in accordance with R307-401-1.
5. All records referenced in this AO or in applicable NSPS, which are required to be kept by the owner/operator, shall be made available to the Executive Secretary or Executive Secretary's representative upon request, and the records shall include the two-year period prior to the date of the request. All records shall be kept for the following minimum periods:
 - A. All Records Five years
 - B. Emission inventories Five years from the due date of each emission statement or until the next inventory is due, whichever is longer.
6. Intermountain Power Service Corporation (IPSC) shall conduct its operations of the Intermountain Generating Station (IGS) coal fired electric steam plant in accordance with the terms and conditions of this AO, which was written pursuant to IPSC's Notice of Intent submitted to the Division of Air Quality (DAQ) on August 3, 2001.
7. This AO shall replace the AO (DAQE-523-01) dated June 28, 2001.
8. The approved installations shall consist of the following equipment or equivalent*:
 - A. Unit #1 Coal Fired Boiler (Subject to NSPS, Subpart Da)
Rating - 8,500 x 10⁶ Btu/hr (MMBtu/hr)
 - B. Unit #2 Coal Fired Boiler (Subject to NSPS, Subpart Da)
Rating - 8,500 MMBtu/hr
 - C. Coal railcar unloading dust collector 1A
 - D. Coal railcar unloading dust collector 1B
 - E. Coal railcar unloading dust collector 1C
 - F. Coal railcar unloading dust collector 1D
 - G. Coal truck unloading dust collector 2
 - H. Coal reserve reclaim dust collector 3
 - I. Coal transfer building #1 dust collector 4
 - J. Coal transfer building #2 dust collector 5
 - K. Coal transfer building #4 dust collector 6
 - L. Coal crusher building dust collector 11
 - M. U1 Generation building coal dust collector 13A
 - N. U1 Generation building coal dust collector 13B
 - O. U2 Generation building coal dust collector 14A
 - P. U2 Generation building coal dust collector 14B
 - Q. Coal pile active and reserve
 - R. Coal Stackout
 - S. Fuel oil tank 1A
Capacity - 675,000 gallons
 - T. Fuel oil tank 1B
Capacity - 675,000 gallons
 - U. Limestone unloading dust collector 1A
 - V. Limestone unloading dust collector 1B
 - W. Limestone transfer dust collector 1

- X. Limestone reclaim dust collector 2
- Y. Limestone silo bin vent filter
- Z. Limestone crusher dust collector 3
- AA. Limestone preparation dust collector 4
- BB. Limestone storage pile
- CC. Lime silo dust collector 1
- DD. Lime hopper dust collector 2
- EE. Soda ash silo dust collector 3
- FF. Soda ash hopper dust collector 4
- GG. Fly ash silo bin vent filter 1A
- HH. Fly ash silo bin vent filter 1B
- II. Combustion byproducts stackout & stockpile
- JJ. Combustion byproducts landfill
- KK. Unit 1 cooling tower 1A
- LL. Unit 1 cooling tower 1B
- MM. Unit 2 cooling tower 1A
- NN. Unit 2 cooling tower 1B
- OO. Coal sample preparation building dust collector
- PP. Sandblast facility dust collector
- QQ. U1 Generation building vacuum cleaning dust collector
- RR. U2 Generation building vacuum cleaning dust collector
- SS. U1 Fabric filter vacuum cleaning dust collector
- TT. U2 Fabric filter vacuum cleaning dust collector
- UU. GSB vacuum cleaning dust collector
- VV. Guzzler truck dust collector
- WW. Emergency diesel generators
 - 1A, rated at - 4,000 Hp
 - 1B, rated at - 4,000 Hp
 - 1C, rated at - 4,000 Hp
- XX. Solvent washers
- YY. Diesel driven fire pump rated at 290 Hp 1B
- ZZ. Diesel driven fire pump rated at 290 Hp 1C
- AAA. Auxiliary boiler 1A (not subject to NSPS)
 - Rating - 166 MMBtu/hr
- BBB. Auxiliary boiler 1B (not subject to NSPS)
 - Rating - 166 MMBtu/hr
- CCC. Coal Conveyors
- DDD. Paint booth/shops
- EEE. Engine driven equipment including compressors, generators, hydraulic pumps and diesel fire pumps
- FFF. Bulb recycling crusher
- GGG. Laboratory fume hoods
- HHH. Gasoline tank
 - Capacity - 500 gallons
- III. Diesel tank
 - Capacity - 10,000 gallons
- JJJ. Diesel day tanks
 - Capacity - not exceeding 560 gallons per tank

- KKK. Mobile oil storage tanks
Capacity - not exceeding 12,000 gallons per tank
- LLL. Turbine lube oil units
Capacity - not exceeding 40,000 gallons per unit
- MMM. Underground storage diesel tank
Capacity - 20,000 gallons
- NNN. Underground storage gasoline tank
Capacity - 6,000 gallons
- OOO. Used oil tank
Capacity - 10,000 gallons
- PPP. Class III Industrial Waste Landfill
- QQQ. Paved haul road
- RRR. Haul road and access road
- SSS. Coal truck unloading grating

* Equivalency shall be determined by the Executive Secretary.

Limitations and Tests Procedures

9. Emissions to the atmosphere at all times from the indicated emission points shall not exceed the following rates and concentrations:

Each Main Boiler (Rated at $8,500 \times 10^6$ Btu/hr)

<u>Pollutant</u>	<u>lb/ 10^6 Btu heat input</u>	
PM ₁₀	0.020	lb/ 10^6 Btu heat input
SO ₂	0.150	lb/ 10^6 Btu heat input based on 30-day rolling-average 10.0 % of the potential combustion concentration
NO _x	0.500	lb/ 10^6 Btu heat input based on 30-day rolling-average

Dust Collectors

<u>Pollutant/Source</u>	<u>grains/dscf</u>
PM ₁₀	
Rail car unloading (4 units)	0.024 (each unit)
Transfer building one	0.024
Unit one 13A	0.024
Transfer building two	0.024
Transfer building four	0.024
Crusher building one	0.024
Unit one 13B	0.024
Unit two 14A	0.024
Unit two 14B	0.024
Limestone preparation building	0.024

Each Auxiliary Boiler (Rated at 166×10^6 Btu/hr)

<u>Pollutant</u>	<u>lb/ 10^6 Btu heat input</u>	<u>lbs/hr</u>
PM ₁₀	0.10	20
SO ₂	0.69	100
NO _x	0.35	58

10. Visible emissions from the following emission points shall not exceed the following values:

- A. All abrasive blasting - 40% opacity
- B. All other points - 20% opacity

Opacity observations of emissions from stationary sources shall be conducted according to 40 CFR 60, Appendix A, Method 9.

For sources that are subject to NSPS opacity standards shall be determined by conducting observations in accordance with 40 CFR 60.11(b) and 40 CFR 60, Appendix A, Method 9.

11. The following consumption limit shall not be exceeded:

- A. 50,000 barrels of fuel oil consumed per calendar year in the auxiliary boilers.

To determine compliance with annual limit, the owner/operator shall calculate a total by the January 20th of each year using data from the previous 12 months. Records of consumption shall be kept for all periods when the auxiliary boiler is in operation. Consumption shall be determined by fuel oil totalizer records. The records of consumption shall be kept on a monthly basis.

- 12. The emergency generators shall be operated on an emergency basis only, except for routine engine maintenance and testing. Records documenting generator usage shall be kept in a log and they shall show the date the generator was used, the duration in hours of the of generator usage, and the reason for each generator usage.
- 13. The diesel driven fire pumps shall be operated on an emergency basis only, except for routine engine and fire system maintenance and testing. Records documenting diesel driven fire pump usage shall be kept in a log and they shall show the date the diesel driven fire pump was used, the duration in hours of the of diesel driven fire pump, and the reason for each diesel driven fire pump usage.

Roads and Fugitive Dust

14. IPSC shall abide by the latest fugitive dust control plan submitted to the Executive Secretary for control of all dust sources associated with the Intermountain Power Generation site.

The haul road length, speed or any other parameter used to calculate emissions shall not be increased above the limits established in the fugitive dust control plan. The haul road speed shall be posted.

15. The facility shall abide by all applicable requirements of R307-205 for Fugitive Emission and Fugitive Dust sources.

Fuels

16. The owner/operator shall combust only bituminous and subbituminous coals as primary fuels and shall only use diesel oil or natural gas during the startup, shutdown, maintenance, performance, upsets and flame stabilization in the $8,500 \times 10^6$ Btu/hr boilers. Only No. 2 oil shall be used in 166×10^6 Btu/hr boilers. The owner/operator may fuel-blend self-generated used oil with coal at the active coal pile reclaim structure providing that self-generated used has not been mixed with hazardous waste.
17. The sulfur content of any fuel oil combusted shall not exceed:
 - A. 0.85 lb per $\times 10^6$ Btu heat input for fuel oil used in the main boilers.
 - B. 0.58 percent by weight for fuel oil combusted in the auxiliary boilers.

The sulfur content shall be determined by ASTM Method D-4294-89 or approved equivalent. Certification of fuel oil shall be either by IPSC's own testing or test reports from the fuel oil marketer.

Federal Limitations and Requirements

18. In addition to the requirements of this AO, all applicable provisions of 40 CFR 60, New Source Performance Standards (NSPS) Subpart A, 40 CFR 60.1 to 60.18 and Subpart Da, 40 CFR 60.40a to 60.49a (Standards of Performance for Electric Utility Steam Generating Units for Which Construction is Commenced After September 18, 1978) and Subpart Y, 40 CFR 60.250 to 60.254 (Standards of Performance for Coal Preparation Plants) apply to this installation.

Records & Miscellaneous

19. At all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any equipment approved under this AO including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Executive Secretary which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. All maintenance performed on equipment authorized by this AO shall be recorded, and the records shall be maintained for a period of two years.
20. The owner/operator shall comply with R307-150 Series. Inventories, Testing and Monitoring.
21. The owner/operator shall comply with R307-107. General Requirements: Unavoidable Breakdowns.

The Executive Secretary shall be notified in writing if the company is sold or changes its name.

This AO in no way releases the owner or operator from any liability for compliance with all other applicable federal, state, and local regulations including R307.

A copy of the rules, regulations and/or attachments addressed in this AO may be obtained by contacting the Division of Air Quality. The Utah Administrative Code R307 rules used by DAQ, the Notice of Intent (NOI) guide, and other air quality documents and forms may also be obtained on the Internet at the following web site: http://www.eq.state.ut.us/eqair/aq_home.htm

The annual emission estimations below include point source, fugitive emissions, fugitive dust and do not include road dust, tail pipe emissions, grandfathered emissions etc.. These emissions are for the purpose of determining the applicability of Prevention of Significant Deterioration, nonattainment area, maintenance area, and Title V source requirements of the R307. They are not to be used for determining compliance.

The Potential To Emit (PTE) emissions for the IPSC power generation plant are currently calculated at the following values:

	<u>Pollutant</u>	<u>Tons/yr</u>
A.	PM ₁₀	248.88
B.	SO ₂	3,698.32
C.	NO _x	24,178.63
D.	CO	1,312.44
E.	VOC	14.29
F.	HAPs	82.67

Approved By:


 Richard W. Sprott, Executive Secretary
 Utah Air Quality Board